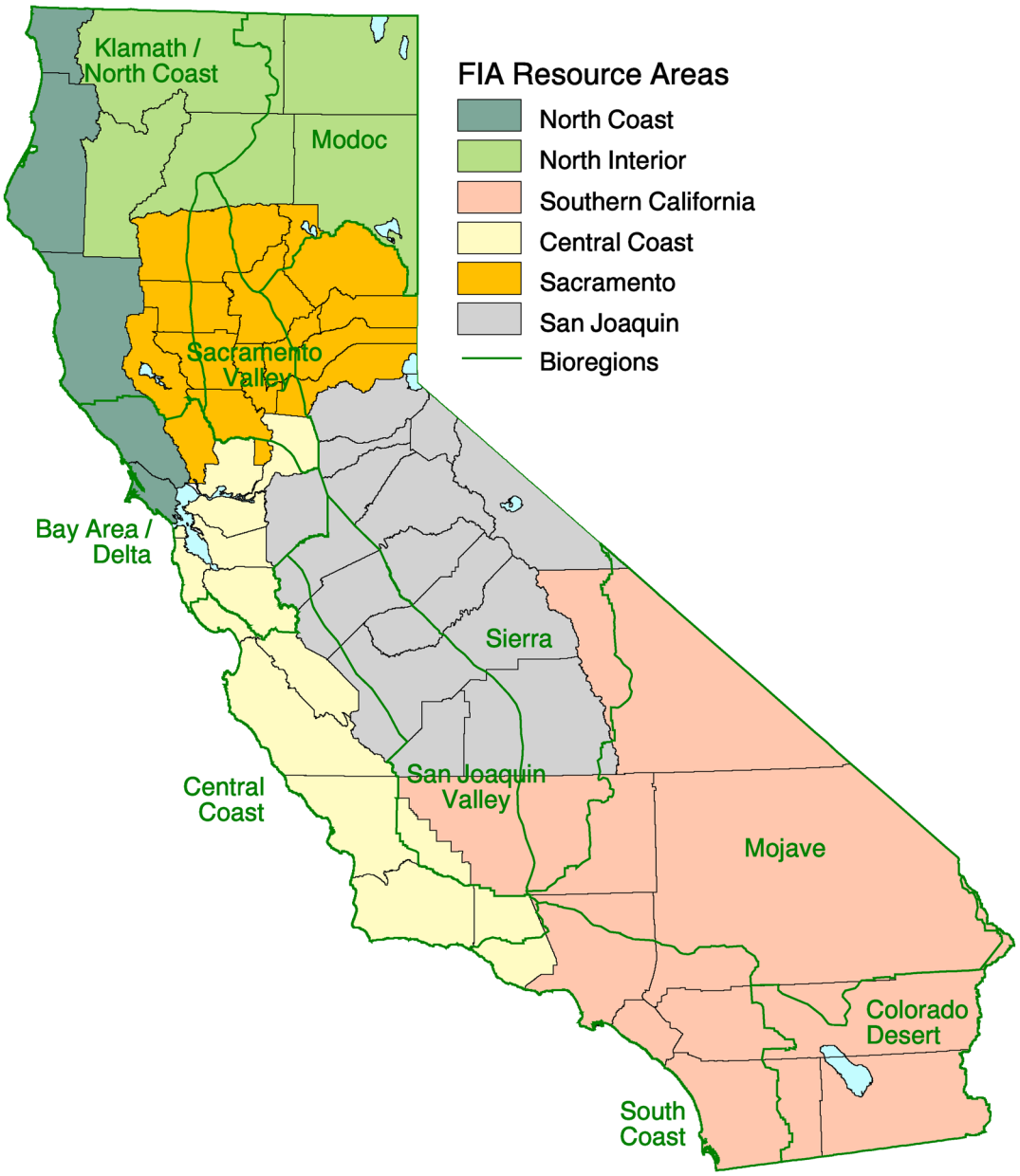
FIA sampling methods and resource areas

Statistics for national forest lands come from sampling conducted by the U.S. Forest Service Pacific Region (Region 5). Statistics for other public forests, such as national parks, are not sampled by PRIME and any data shown in reports for these land areas is from the administering agency. PRIME maintains permanent field plots in California to collect FIA data on a ten–year cycle. In 1992, the FIA surveys were modified from the ten–year cycle to a continuous rolling survey in which a portion of the Statewide plots are measured every year. The FIA survey uses a grid–sampling framework with each FIA sample plot representing about 7,700 acres of land. FIA groups these data into the North Coast, North Interior, Sacramento, Central Coast, and San Joaquin and Southern Resource Areas (Figure 1).

Because FIA is a statistical sample of forest area and conditions, sampling errors exist around the published values. The confidence interval or range of sampling error variability is published in the FIA documents for each forest statistic. Generally, the confidence interval for entire resource area estimates is less than +/– 60,000 acres, or 2 percent of the total area estimations. FIA is designed for national resource assessments and to provide accuracy appropriate for regional assessments. When users summarize the data for smaller units or ownership or county, sampling errors grow. For example, mortality estimates on other public ownership in the Northern Interior Resource Area has a 41 percent sampling error. Refer to the publications for information on specific sampling errors.

Figure 1. FIA resource areas, CBC bioregions, and county boundaries



Source: FRAP, 2002